PCV26

THROMBOPROPHYLAXIS OF PATIENTS RECEIVING TOTAL HIP REPLACEMENT: 1998–2002 VERSUS 2003–2007

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OBJECTIVES: To compare initial in-hospital thromboprophylaxis and first treatment after discharge between 1998–2002 and 2003–2007, among patients receiving total hip replacement (THR) in the The Netherlands. **METHODS:** From the PHARMO database, all patients ≥18 years with a THR hospital admission between January 1998-June 2007 were selected. Patients with in-hospital pharmacy data, referred home after discharge, and a follow-up in PHARMO of ≥six months after surgery were included in the study cohort. **RESULTS:** Of the total 6,000 THR patients, 2,106 (35%) underwent surgery in 1998–2002 and 3,894 (65%) in 2003–2007. About one third of all patients were male and mean age was 68 years. Length of hospital stay decreased over time: in later years, 52% of THR patients were hospitalized for ≤one week compared to 17% of the 1998–2002 patients. Initial in-hospital thromboprophylaxis was mostly with LMWH: 66% of patients in 1998–2002 and 70% in 2003–2007. After the introduction of fondaparinux in 2003, the proportion of patients treated in-hospital with vitamin K antagonists (VKAs) or combination LMWH+VKAs decreased (13% to 6% and 18% to 3% respectively). After discharge, 53% of patients with a THR in 1998–2002 received VKAs and 17% were treated with LMWH. In contrast, 44% of patients from 2003–2007 received LMWH and only 9% were treated with VKAs at home. The proportion of patients receiving no antithrombotic treatment after discharge increased from 30% to 38%. **CONCLUSIONS:** In both five-year time frames, in-hospital thromboprophylaxis among THR patients was mostly with LMWH. First treatment after discharge shifted from primarily VKAs in 1998–2002 to LMWH in 2003–2007. Although guidelines recommend thromboprophylaxis for six weeks after surgery, our data show that in later years 38% of patients did not receive antithrombotic treatment after discharge. With an average hospital stay of 8 days, we can therefore assume a six-week treatment period is not common practice.

PCV27

THE USE OF ALENDRONATE AND CARDIOVASCULAR DISEASES

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OBJECTIVES: We aimed to compare the risk of atrial fibrillation (AF), stroke or acute myocardiac infarction (AMI) associated with the use of alendronate and raloxifene. We also focused on examining the effect of different dosage forms of alendronate (10 mg/daily dose versus 70 mg/weekly dose). **METHODS:** We used the National Health Insurance Research Database for a 8-year population-based retrospective cohort study. The study population was those women who first took alendronate or raloxifene during 2002–2006 and had a history of osteoporosis and vertebral or spinal fracture. The outcome measurements include AF, stroke, AMI, or until the end of the one-year follow-up period. Cox proportional hazards model was used to control the potential confounders. **RESULTS:** 9,609 women who had been prescribed either alendronate (6,494; 72.32%) or raloxifene (2,660; 27.68%) were included. Alendronate users were not at a higher risk of AF (HR 0.60; 95% CI, 0.42–0.85), stroke (HR 0.47; 95% CI, 0.39–0.57) or AMI (HR 0.51; 95% CI, 0.36–0.72) compared to the raloxifene group. When separating the alendronate by different dosage forms, users of alendronate 10 mg had a higher risk of AF (HR 1.66 95% CI, 1.12–2.46) and stroke (HR 1.56; 95% CL, 1.23–1.98) compared to the raloxifene while the alendronate 70 mg was at a significantly lower risk of AF (HR 0.28; 95% CI, 0.18–0.43), stroke (HR 0.23; 95% CI, 0.18–0.30) and AMI (HR 0.28, 95% CL, 0.18–0.41). The alendronate 70 mg group also demonstrated a lower risk of cardiovascular diseases to alendronate 10 mg group in AF, stroke, or AMI with HR of 0.17, 0.16 and 0.21, respectively. **CONCLUSIONS:** Alendronate 10 mg users had a higher risk of AF and stroke compared to raloxifene and a higher risk of all three cardiovascular outcomes compared to alendronate 70 mg. Further studies are required to investigate this relationship.

PCV28

TEN-YEAR TRENDS IN STATIN USE AMONG ELDERLY WOMEN

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OBJECTIVES: Recent evidence suggests caution in the use of statins among women and the elderly, with some movement towards re-evaluating US guidelines among these groups. Therefore, it is important to analyze trends in rates of statin use and patterns of subgroup differences over a 10-year period among elderly women. This study examines trends and subgroup differences in statin use over 10 years among elderly women 65+ years of age using a nationally representative survey. **METHODS:** Analyses included cross-sectional data (1995–2005) of merged Medicare claims and survey data on women Medicare beneficiaries from cost and use files of the Medicare Current Beneficiary Survey(MCBS). Statin use was identified from self-reports. Chi-square tests and logistic regressions were performed to analyze patterns of statin use. Independent variables consisted of demographics, socio-economic status, health, functional status, and other risk factors related to cardiovascular morbidity (diabetes, hypertension, hyperlipidemia, smoking, and obesity). All analyses accounted for the complex design of the MCBS. **RESULTS:** Overall, 6% in 1995 and 36% in 2005 used statins, a 6-fold increase over a period of 10 years. Among those with hyperlipidemia, statin use increased from 25% to 55%. Even after controlling for major risk factors such as diabetes, hypertension, hyperlipidemia, obesity, and smoking, elderly Latina women were less likely to use statins compared to elderly white women. Stain use was more likely among elderly women living in urban areas vs. rural areas. While older women were less likely to be on statins in 1995, the age differences disappeared in 2005. **CONCLUSIONS:** Statin use has consistently increased over the past decade; among those with hyperlipidemia, only 55% remained on statins, suggesting subgroup differences in use patterns. Ethnic and rural/urban treatment disparities were evident in 2005. Further research is needed on the determinants of statin use among elderly Latina and rural women.

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THROMBOPROPHYLAXIS OF PATIENTS RECEIVING TOTAL KNEE REPLACEMENT: 1998–2002 VERSUS 2003–2007

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OBJECTIVES: To compare initial in-hospital thromboprophylaxis and first treatment after discharge between 1998–2002 and 2003–2007, among patients receiving total knee replacement (TKR) in the The Netherlands. **METHODS:** From the PHARMO database, all patients ≥18 years with a TKR hospital admission between January 1998-June 2007 were selected. Patients with in-hospital pharmacy data, referred home after discharge, and a follow-up in PHARMO of ≥six months after surgery were included in the study cohort. **RESULTS:** Of the total 2721 TKR patients, 749 (28%) underwent surgery in 1998–2002 and 1972 (72%) in 2003–2007. About 30% of all patients were male and mean age was 69 years. Length of hospital stay decreased over time: in later years, 44% of TKR patients were hospitalized for ≤one week compared to 15% of the 1998–2002 patients. Initial in-hospital thromboprophylaxis was mostly with LMWH: 66% of patients in 1998–2002 and 79% in 2003–2007. After the introduction of fondaparinux in 2003, the proportion of patients treated in-hospital with vitamin K antagonists (VKAs) or combination LMWH+VKAs decreased (14% to 6% and 19% to 2% respectively). After discharge, 49% of patients with a TKR in 1998–2002 received VKAs and 18% were treated with LMWH. In contrast, 52% of patients from 2003–2007 received LMWH and only 7% were treated with VKAs at home. The proportion of patients receiving no antithrombotic treatment after discharge increased from 34% to 39%. **CONCLUSIONS:** In both five-year time frames, in-hospital thromboprophylaxis among TKR patients was mostly with LMWH. First treatment after discharge shifted from primarily VKAs in 1998–2002 to LMWH in 2003–2007. Although guidelines recommend thromboprophylaxis for 6 weeks after surgery, our data show that in later years 39% of patients did not receive antithrombotic treatment after discharge. With an average hospital stay of 9 days we can therefore assume a six week treatment period is not common practice.

PCV30

TARGETING AFRICAN AMERICANS WITH CONGESTIVE HEART FAILURE: THE CASE OF BIDIL

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OBJECTIVES: Previous studies suggest an underuse of evidence based drug therapies for chronic disease treatment in for underserved. This study examines utilization patterns for the heart failure drug, BiDil and its generic components, isosorbide dinitrate and hydralazine. BiDil was marketed for African Americans as a primary therapy for congestive heart failure, a particularly prevalent problem in this population. **METHODS:** The analysis uses a repeated measures ANOVA with data obtained from the Center for Medicaid and Medicare Services for 1999–2008. Prescriptions were segmented by calendar quarters. Data were extracted using National Drug Codes for BiDil and for each generic. State level data were combined by United States Census-defined regions. The model determined if there are significant differences in prescription rates controlling for sex, age, race, geographic region, and proportion non-white. **RESULTS:** Approximately 50% of prescriptions for BiDil were from the 17 state South region with a 20% African American population. The least number of prescriptions (7%) were from the West region comprising 13 states and 10% African Americans. The Northeast and South regions had the earliest BiDil uptake. Isosorbide rates showed a steady decline from 1999 to 2008 with no significant shift after BiDil's market introduction in July, 2005. Hydralazine use showed a similar pattern. Early analysis demonstrated a correlation between geographic region and utilization. Additional analyses use National Center for Health Statistics ambulatory care survey data to assess the significance of the regional correlation and the extent to which race and other patient factors influence use of BiDil or its generics. **CONCLUSIONS:** Demographic variation suggests differences in prescription rates by racial makeup within regions as expected. Overall utilization of BiDil or its generics is low or declining. Further research is required to investigate the factors influencing use of BiDil as a heart failure therapy.